

6

BULLETIN

ON

SAFETY INSTRUCTION IN SCHOOLS

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The last legislature enacted a law providing for the giving of safety instruction in schools. The law is as follows:

1. It shall be the duty of each teacher in a public school in the state of Wisconsin to devote not less than thirty minutes in each month during which such school is in session to instructing the pupils thereof as to ways and means of preventing accidents.

2. The state superintendent of public instruction shall prepare and publish at state expense a book conveniently arranged in chapters or lessons for the purpose of the instruction provided in this section and shall furnish a copy thereof to each teacher required to give such instruction.

3. The members of the board of education, school directors, trustees, or other bodies or persons having control of the schools of a township, village or city, shall cause a copy of this section to be printed in the manual or handbook prepared for the guidance of teachers where such manual is in use.

This pamphlet is issued as a preliminary to a pamphlet or primer to be issued later. This pamphlet was prepared at the request of the department by C. W. Price, Assistant to the Industrial Commission of Wisconsin.

C. P. CARY,
State Superintendent.

SAFETY INSTRUCTION IN SCHOOLS

SUGGESTIONS TO TEACHERS.

A large number of manufacturers in the United States who during the past five years have reduced deaths and serious injuries from accident from 50 to 75 per cent, have discovered that not more than one-third of the reductions which were made were accomplished by the use of any mechanical safeguard, while two-thirds of the reductions were accomplished through instructing the workmen and securing their interest and active co-operation. The records of the Industrial commission at Madison confirm this experience. A recent study of 7900 accidents which happened in the state of Wisconsin during thirteen months revealed the fact that 2,500 of these accidents happened on machines and machine parts, while 5,400 were caused by men slipping, falling, stumbling, dropping heavy objects, handling tools, etc.

It is probable that a large percentage of the 2,500 machine accidents could have been prevented by the use of guards. Only a comparatively few of the 5,400 accidents could possibly have been prevented by the use of any mechanical device; the prevention of these accidents depends upon reaching the man on the job.

The work of building guards by the manufacturers in Wisconsin is going forward rapidly and within a year the majority of the plants will practically have completed this work. The problem which now concerns the manufacturers and the one which is claiming their special study is how to reach the workmen and instruct them in regard to how they can protect themselves.

The boys and girls in the continuation schools who are now working in the factories, and the boys and girls in the regular

schools who will go into the factories when they finish their schooling will have practically no use for knowledge with reference to the construction of guards. The one thing that is of primary importance is that they shall be taught what they can do to protect themselves and their fellow workmen.

The twenty-five instructions on points of danger hereto attached have been compiled after corresponding with some twenty-five manufacturers who employ young people and after going over the instructions which are included in the books of safety rules published by various manufacturers who are doing successful safety work.

In presenting the various subjects to the pupils it will add very much to the interest and will help to fasten the lesson if the pupils and the teacher will bring in to the class stories of accidents which have actually happened. These accidents can be gathered from the factories of the town, from clippings from newspapers, or bulletins of the Industrial commission, Madison, Wis.

INSTRUCTION IN SAFETY

Drafted by the Wisconsin Industrial Commission.

1. Elevators.

(a) Never attempt to enter or leave an elevator until the operator stops it at the floor level and opens the door or gate. The records of accidents in the United States show that three-fourths of the deaths and serious injuries which happen on elevators are caused by carelessness or ignorance in entering and leaving elevators.

(b) When riding on an elevator always stand well back in the car and under no circumstances engage in any fooling or scuffling. Remember you are riding on a dangerous machine and you must be cautious.

(c) Never operate an elevator without special permission from your foreman. It is always dangerous.

(d) Do not ride on elevators not used for passengers.

2. Stairways.

In going down stairs if possible always place your hand on the rail so as to prevent yourself from stumbling. It is always dangerous to run down stairs. You are liable to fall and break your arm or otherwise seriously injure yourself.

3. Rushing to the door.

Rushing to the door or downstairs when the whistle blows is always dangerous. You are liable to fall and break an arm or leg, or be otherwise seriously injured.

4. Clothing.

(a) Boys who operate machines or work around machines should never wear coats or shirts with baggy or ragged sleeves

and the overalls should be kept properly buttoned. Many serious accidents have been caused by ragged or baggy sleeves or pants being caught in the machinery. Loose flying neckties are also dangerous.

(b) Girls who operate machines or work around machinery should not wear dresses with baggy or ragged sleeves. They should always wear aprons which are tied back with two strings so that the apron cannot fly out and be caught in the machinery. It has also been found dangerous to wear rings or bracelets because they may be caught in the machinery.

(c) Girls who operate machines or work around machinery should always wear caps over their hair so their hair will not be caught. A number of deaths have been caused by the hair being caught on a moving shaft and in gearing.

5. Cleaning machines while in motion.

Remember that it is always dangerous to clean your machine while it is in motion. The soft waste or rags which you use for cleaning are liable to be caught in the moving parts and your hands and arms may be drawn into the machine and crushed.

In Wisconsin during the last eighteen months there have been about 500 persons injured because they cleaned their machines while the machines were in motion. About one-half of these persons lost one or more fingers and some of them lost their hands and arms.

6. Notify foreman if machine is out of order.

If your machine is out of order or if there is anything about its operation which you do not understand, report at once to your foreman and do not use the machine until your foreman gives you orders. A machine which is out of order is always dangerous.

7. Looking around while operating machine.

While operating a machine of any kind do not look around or talk to other persons. This is always dangerous and may result in your hands being caught in the machinery.

8. Starting machine.

Never start your machine until you make sure there is no one near who will be caught.

9. Operating another man's machine.

Never try to fool with or operate a machine which belongs to some other man. A machine which you do not understand is always a dangerous machine. Keep your hands off things which do not concern you.

10. Machines in motion.

Always treat a machine in motion as if it were dangerous and do not take chances.

11. Punch presses.

Boys and girls who operate punch presses should be especially careful because this is one of the most dangerous machines in the shop. In operating always avoid placing your hands under the punch so far as possible. When the die or tool becomes clogged do not try to dig it out with your fingers but use a hook.

12. Belts.

When working or passing near a belt be especially careful. There is always danger of the clothing being caught between the belt and the pulley. Persons standing on ladders near belts should always be especially careful. Fast moving belts are liable to accumulate electricity which may cause a person touching them to start suddenly and lose his balance and be caught in the machinery.

13. Fooling and scuffling.

Boys and girls should not fool and scuffle and play jokes in the factory. This is always dangerous because they may be thrown into dangerous machinery or fall down shaftways or stairways. Never throw things at another person.

14. Use of guards.

The safeguards which are placed over dangerous points on machines are placed there to be used by you to protect you from being injured. Do not remove these guards unless you get special permission from your foreman, and then only remove them when your machine is stopped. Before starting your machine be sure that the guard is in its proper place.

15. Eye protection.

Whenever you operate an emery wheel or work with tools which cause chips to fly, always wear a pair of glasses or goggles. Many persons have been made blind in one or both eyes by flying chips. Good goggles of glass will almost perfectly protect the eyes from injury.

16. Nails on floor.

Do not drop nails on the floor and specially do not leave pieces of wood with nails sticking up in them lying on the floor or in the passageways. When you see such nails always pick them up. Hundreds of serious accidents are caused by people stepping on nails. The doctors say that every time a foot is injured by a nail serious blood poisoning may result.

17. Things to stumble over.

Care should be taken not to leave things in the aisles or passageways over which persons may stumble and fall. Many arms and legs have been broken by people stumbling.

18. Piling material.

In piling material of any kind always be careful to so pile the material that it will not fall over and parts will not slip off the top.

19. Loading trucks.

In loading trucks or cars with materials be careful to see that the material is so loaded that it will not fall off. Remember that the truck passes by many persons as it goes through the shop and if it is dangerously loaded some one may be hurt.

20. Electrical apparatus.

Never fool with electrical apparatus—it is alive and dangerous. Treat all electrical wires as if they are alive.

21. Compressed air.

Never fool with a compressed air hose—it is dangerous.

22. Standing under cranes.

Avoid standing under objects which are being carried across the shop by overhead cranes. The chain is liable to break and the object to fall.

23. Taking a chance.

Do not take a chance—the chance-takers and the fools are the ones who get hurt.

24. Obey orders.

Obey orders like a good soldier. Remember when your foreman gives you instructions in regard to safety he is trying to protect you. Thousands of people have been injured because they disobeyed rules of safety. Read the rules and understand them.

25. Sitting in windows.

Sitting in the window in the summer time is dangerous. You are liable to fall out and be injured.

SAFETY MOTTOES.

It is better to be careful than crippled.

Good scouts are always cautious—be a good scout.

You need two eyes—look out.

One little match carelessly dropped can burn a town.

When you scent danger, stop! look! listen! Something may drop.

You do not want a crutch—be careful.

Better lose a minute of play than lose an arm.

Watch your step.

Chance-takers and fools get hurt. Don't take a chance.

Get the "Safety First" habit.

OUTLINE FOR SAFETY PRIMER.

1. The book is being prepared by a safety engineer, an educator and a story writer, under the auspices of the National Council for Industrial Safety.

2. The subject will be presented from the child's point of view and will be written in such simple language that the youngest child can understand it.

3. The writers of the book will endeavor to present the subject on a high plane, above the material, emphasizing the value of the human life, etc.

4. The book will be fully illustrated with pictures showing how accidents may happen. Horrible pictures showing crippled children, etc., will not be included.

5. The book, from beginning to end, will emphasize what the child can do to protect himself. The object will be to teach habits of caution. No instruction will be given in respect to the building of guards, but suggestions will be included in regard to the use of guards provided by the employer.

6. The book will be divided into five sections and each section will be complete in itself so that it may be published in a separate pamphlet or the five sections may be collected into one book.

7. An introduction will be included which will be designed to instruct the teacher in regard to the best methods of presenting the subject.

8. Plates will be made of the book, which plates will be owned by the National Council for Industrial Safety. These plates will be loaned without cost to any state or city desiring to use them. If the book is published by the Council it will be sold at cost. If it should be necessary to allow one of the leading school book publishers to handle the book it will be done under contract which will fix a price at which the book must be sold. This contract will in no way hamper the Council in using the plates as it desires.

OUTLINE FOR SAFETY PRIMER

Section 1—Home.

- (a) Play
- (b) Throwing Things
- (c) Poisons
- (d) Fire, matches, explosives
- (e) Lamp, kerosene, gasoline
- (f) Fire arms
- (g) Fourth of July
- (h) Gas, lighting gas stove
- (i) Electricity (live wires in streets), loose wires crossing often cause fires
- (j) Climbing around new buildings
- (k) Animal kicks and bites
- (l) Hot water—steam
- (m) Drowning

Section 2—Streets and Street Cars

- (a) Automobiles, trucks, etc.
- (b) Crossing streets
- (c) Playing in streets
- (d) Live wires
- (e) Hitching on automobiles
- (f) Getting on and off street cars

Section 3—Railroads

- (a) Trespassing
- (b) "Hopping Trains"
- (c) Going between, under and over and in front of cars
- (d) Crossings

Section 4—Factories, shops and stores. (This chapter will be especially adapted to children in the 6th, 7th and 8th grades who will soon enter factories and shops.)

- (a) Elevators
- (b) Stairways
- (c) Rushing to the door
- (d) Clothing
- (e) Cleaning machines while in motion
- (f) Notify foreman if machine is out of order
- (g) Looking around while operating machine
- (h) Starting machine
- (i) Operating another man's machine
- (j) Machines in motion
- (k) Punch presses
- (l) Belts
- (m) Fooling and scuffling
- (n) Use of guards
- (o) Eye protection
- (p) Nails on floor
- (q) Things to stumble over
- (r) Piling material
- (s) Loading trucks
- (t) Electrical apparatus
- (u) Compressed air
- (v) Standing under cranes
- (w) Taking a chance
- (x) Obey orders
- (y) Sitting in windows

Section 5—Apprentices and continuation pupils in factories and shops. This chapter will be written after the same outline as section 4, but more complete and adapted to advanced students.

